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Foreign exchange risk management: a description and assessment of Australian Firms' practices

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**FOREIGN EXCHANGE RISK MANAGEMENT: A DESCRIPTION AND
ASSESSMENT OF AUSTRALIAN FIRMS' PRACTICES**

A thesis is submitted in fulfilment of the requirements for the award of the degree

Doctor of Philosophy

From

University of Wollongong

By

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The School of Accounting and Finance
2006

CERTIFICATION

I, Bunyamin, declare that this thesis, submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the School of Accounting and Finance, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

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Bunyamin
31st August 2006

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Abstract

The extension of floating exchange-rate regimes and going change in the global nature of business are the two of the most critical factors that constitute business risk today. Australian firms engaging in international business have to manage the adverse consequences of exchange rate movements because firms may confront greater business risk that arises from, among other factors, the volatility of the Australian dollar since floating in 1983, the nature of the Australian products sold overseas, and the increase in international operations of the firm. Recent corporate crashes, indeed, demonstrate the urgency for managing foreign exchange exposure as part of providing adequate corporate governance.

Against this background, this study aims to examine how Australian firms with significant foreign exchange exposure respond to such business environments. Specifically, this study is aimed at identifying and assessing the firms' practices on the management of foreign exchange exposure. This study also goes beyond a descriptive nature by investigating the potential association between firm-specific characteristic variables that may contribute to the efficacy of such practices and management practice variables.

The selected firms in the study comprise large Australian firms covering major industries, both foreign and domestic owned, based in New South Wales with annual sales equal to and greater than \$10 million AUD and those with significant foreign exchange exposure. Data was gathered from Dun & Bradstreet (D&B). From 25,580 Australian firms compiled by the database at June 2002, 9646 firms were based in New South Wales. From this number, 299 firms were selected for sample. A mailed questionnaire was sent to the selected firms and 20.4 percent were found to be useable for analysis.

The first part of analysis is essentially descriptive concerning the Australian firms' practices on foreign exchange exposure management. The description covers issues that are classified into exposure identification, policy adoption, and the techniques used in foreign exchange exposure management. Three types of foreign exchange exposures, translation, transaction, and economic exposures have been recognized by Australian firms of which transaction exposure is the most important form. Most of the surveyed firms identified that foreign sales and purchases were the major source of transaction exposure while forecasts based on 'orders' and 'cash-by-currency' were the principle techniques used for identification. An analysis on translation exposure revealed that the majority of participating firms do not manage this exposure because it is perceived as either not real or it is primarily addressed only at headquarters. A particular analysis on economic exposure showed that many Australian firms recognized this exposure type although only few firms managed it. This indicates an increase in the awareness of this type of exposure.

The analysis also described major aspects of foreign exchange exposure management policy. Most of the participating firms stated that 'the volatility of the foreign exchange of currency with which they are dealing' is the major factor driving the firms' foreign exchange exposure management. In terms of objectives, Australian firms tend to be more conservative and a passive policy is shown to be most popular. A particular analysis on forecasting policy also revealed that most firms undertake

formal foreign exchange forecasts which are mostly supplied by banks in particular forms, namely, 'indication of expected direction of movement' and 'point estimate of the expected rate at given future date'. As with previous studies, it is also reaffirmed that Australian firms have a high degree of centralization.

Finally, the use of internal and external techniques in this study showed that the most two popular internal techniques are 'netting' and 'a multi-currency billing system'. This study also found that there are a large number of firms that do not use any internal techniques due to insufficient information technology skills. With respect to the external techniques, forward contract is the most popular technique used.

The analysis in this study is then carried out to evaluate the efficacy of the firms' practices on foreign exchange exposure management. In general, this study suggests ineffective practices found in many exposure-management elements. In terms of identification, economic exposure is the only exposure that has not been properly identified and it appears to be properly managed by only a few firms. With respect to policy adoption, most Australian firms have a conservative attitude in their foreign exchange exposure management, which is reflected in their preference for a passive policy. Implementing a passive policy, particularly for firms with transaction exposure as their major type, is ineffective because most of the surveyed firms have sufficient forecasting components and a higher degree of centralization. In terms of techniques used, it appears that forward contracts are used as an implementation of passive policy although the use of the forward contracts in this way is arguably ineffective. This is because most Australian firms have employed a sufficient forecasting policy concentrating on currencies they are dealing with in the form of either 'an indication of expected direction of movement' or 'point of estimate at a given future date'. By having this forecasting information, it is possible to save costs by adopting a more active policy.

Finally, there are firm-specific factors that apparently contribute to the firms' practices on foreign exchange exposure management. Chi-squared tests for independence are used to investigate the association between firm-specific variables (firm size, the degree of foreign involvement, and ownership) and management practice variables (the adoption of either an active or passive policy, the degree of centralization and the techniques used). Although, there is no conclusive result, it appears that larger firms use more varied techniques than smaller firms because firm size implies greater resources that are available to cover the costs and potentially have a greater access to expertise. The degree of foreign involvement was found to be the only significant variable associated with the adoption of either an active or passive policy. This also suggests a more conservative attitude amongst firms. The degree of centralization is also another management practice variable found to be the only variable that has a significant association with ownership. It appears that foreign-owned firms need head office approval for foreign borrowing or lending of funds, conducting business involving foreign currencies, and entering into the foreign exchange markets for hedging purposes. Finally, there is a significant association between the degree of centralization and the adoption of either an active or passive policy. This provides a better result than previous studies that suggest an active policy when centralization is implemented. However, it has been found here that Australian firms tend to adopt a passive policy, even though a higher degree of centralization is implemented.

Table of Contents

CHAPTER 1: INTRODUCTION	1-13
1.1. Exchange-Rate Risk and Globalization	1
1.2. The Problem Definition and Significance of Study	2
1.3. The Dimensions of Foreign Exchange Exposures	3
1.4. The Focus of Study	4
1.4.1. First Issue	5
1.4.2. Second Issue	9
1.5. The Contributions of Study	10
1.6. The Structure of Thesis	12
 CHAPTER 2: THE CONCEPT OF RISK, EXPOSURE, AND THE IMPORTANCE AND THE NECESSITY OF MANAGING FOREIGN EXCHANGE EXPOSURE	 14-42
Introduction	13
2.1. The Concepts of Risk	14
2.1.1. Meaning of Risk	14
2.1.2. Foreign Exchange Risk: One Type of Business Risk	14
2.2. Foreign Exchange Rate Risk and Exposure	15
2.3. The Importance of Foreign Exchange Exposure Management	17
2.3.1. Foreign Exchange Exposure Management and the Value of Firm	17
2.3.2. The Reduction in Taxes and Exposure Management	18
2.3.3. Exposure Management and Expected Cost of Financial Distress	18
2.3.4. Exposure Management and Investment Decisions	19
2.3.5. Empirical Evidence of Exposure Management on the Financing Decision	 21
2.3.6. Empirical Evidence on the Effect of Foreign Exchange Exposure on the Value of the Firm	 24
2.4. Corporate Governance and Foreign Exchange Exposure Management	27
2.4.1. Translation; Definition, Objectives, and Methods	27
2.4.2. Hedge Accounting	29

2.4.3. Social Responsibilities	30
2.5. The Failure of Argument against Foreign Exchange Exposure Management	32
2.5.1. PPP and Exposure Management	32
2.5.2. Modigliani-Miller (M-M) Theorem and Exposure Management	34
2.5.3. CAPM and Exposure Management	36
2.5.4. Efficient Market Hypothesis and Exposure Management	37
2.6. Summary	41

CHAPTER 3: EXPOSURE IDENTIFICATION, POLICY, AND

TECHNIQUES IN FOREIGN EXCHANGE EXPOSURE

MANAGEMENT	43-91
Introduction	43
3.1. Foreign Exchange Exposure Identification	43
3.1.1. Types of Foreign Exchange Exposure	44
3.1.2. Accounting versus Economic Exposures	45
3.1.3. Accounting Approach	48
3.1.4. Non-accounting Approach	49
3.1.5. Three Categories of Foreign Exchange Exposure	50
3.2. Sources and Measurements of Foreign Exchange Exposure	50
3.2.1. Sources and Measurements of Transaction Exposure	50
3.2.2. Sources and Measurements of Translation Exposure	51
3.2.3. Sources of Economic Exposure	51
3.2.3.1. A Narrow Perspective	52
3.2.3.2. A Broad Perspective	52
3.2.4. Measurements of Economic Exposure	53
3.2.4.1. Economic Exposure as a Regression Coefficient	54
3.2.4.2. Economic Exposure as a Function of Financial Variables	54
3.2.4.3. Flow Measures	55
3.2.4.4. Stock Measures	55
3.2.4.5. Other Approaches	56
3.3. Foreign Exchange Exposure Management Policy	57
3.3.1. Defining Corporate Attitude to Foreign Exchange Exposure	57
3.3.2. Foreign Exchange Exposure Management Objectives	59

3.3.3. Major Reasons for Managing Exposure	60
3.3.3.1. Major Reasons for Managing Translation Exposure	60
3.3.3.2. Major Reasons for Managing Transaction and Economic Exposure	61
3.3.4. A Passive versus Active Policy in Currency Exposure Management	62
3.3.5. Organizing Foreign Exchange Exposure Management	65
3.3.5.1. Centralization vs. Decentralization in Organizational Management	66
3.3.5.2. Centralization vs. Decentralization in Exposure Management	67
3.3.5.3. The Degree of Centralization	69
3.4. The Use of Techniques.....	70
3.4.1. Internal Techniques	70
3.4.1.1. Matching	70
3.4.1.2. Netting	73
3.4.1.3. Leading and Lagging	74
3.4.1.4. Inter-firm Foreign Exchange Contract	75
3.4.1.5. Price Considerations	76
3.4.2. External Techniques	77
3.4.2.1. Spot Cover	78
3.4.2.2. Forward Cover	79
3.4.2.3. Currency Futures	82
3.4.2.4. Currency Swaps	83
3.4.2.5. Options	84
3.5. Firm-specific Characteristics, Empirical Evidence	86
3.6. Summary	90
 CHAPTER 4: RESEARCH METHOD	 92-119
Introduction	92
4.1. Research objectives and Hypothesis	92
4.2. Methods of Data Collection Used in Previous Studies	94
4.2.1. The First Area	94
4.2.2. The Second Area	96

4.3. Sample Selection	97
4.4. Method of Data Collection	98
4.4.1. Types of Questionnaire	99
4.4.1. Pilot study	99
4.4.2. Classification of statements in Questionnaire	101
4.4.2.1. Part 1: Company Characteristics	101
4.4.2.2. Part 2: Foreign Exchange Exposure Identification	102
4.4.2.3. Part 3: Foreign Exchange Exposure Management Policy	103
4.4.2.4. Part 4: Techniques in Foreign Exchange Exposure Management.....	105
4.5. Method of Analysis	106
4.5.1. Qualitative analysis	106
4.5.1.1. Foreign Exchange Exposure Identification	107
4.5.1.2. Foreign Exchange Exposure Management Policies	107
4.5.1.3. Techniques in Exposure Management	110
4.5.2. Quantitative Analysis	111
4.5.2.1. Firm Size:	112
4.5.2.2. The Degree of foreign Involvement	113
4.5.2.3. Ultimate Ownership	113
4.5.2.4. The degree of Centralization	116
4.5.2.5. The use of Internal and External techniques	117
4.6. Summary	119

CHAPTER 5: FOREIGN EXCHANGE EXPOSURE MANAGEMENT

PRACTICES BY AUSTRALIAN FIRMS	120-147
Introduction	120
5.1. Reasons for Identifying Corporate Practices and Policy	120
5.2. Foreign Exchange Exposure Identification	123
5.2.1. Major Exposures	124
5.2.2. Types of Foreign Exchange Exposure Managed	125
5.3. Policies in Foreign Exchange Exposure Management	130
5.3.1. Driving Factors of Foreign Exchange Exposure Management	130
5.3.2. Major Objectives	131

5.3.3. An Active versus Passive Policy	133
5.3.4. Percentage of Cover on Foreign Exchange Exposures	135
5.3.5. Exchange-rate Forecast	137
5.3.6. The Degree of Centralization	140
5.4. Techniques in Foreign Exchange Exposure Management	142
5.5. Summary	145

CHAPTER 6: THE EFFICACY OF CURRENT CORPORATE PRACTICES AND THE IMPORTANCE OF FIRM-SPECIFIC CHARACTERISTICS

CHARACTERISTICS	148-160
Introduction	148
6.1. Foreign Exchange Exposure Identification	148
6.2. Policy	150
6.3. Techniques	154
6.3.1. Internal Techniques	154
6.3.2. External Techniques	157
6.4. Summary	159

CHAPTER 7: FIRM-SPECIFIC CHARACTERISTICS AND FOREIGN EXCHANGE EXPOSURE MANAGEMENT PRACTICES

Introduction	161
7.1. Specification of Hypotheses	161
7.2. Firm Size and the Management Practice Variables	162
7.2.1. Firm size and External Techniques Used	162
7.2.2. Firm Size and Internal Techniques Used	167
7.2.3. Firm Size and the Adoption of an Active versus Passive Policy	168
7.2.4. Firm Size and the Degree of Centralization	170
7.3. The Degree of Foreign Involvement (DFI) and the Management Practice Variables	171
7.3.1. The DFI and The adoption of Active versus Passive Policy	172
7.3.2. The DFI and the Degree of Centralization	173
7.3.3. The DFI and External techniques Used	175

7.3.4. The DFI and the Internal Techniques Used	176
7.4. Ownership and the Management Practice Variables	178
7.4.1. Ownership and the Degree of Centralization	178
7.4.2. Ownership and the Adoption of Active vs. Passive Policy	181
7.4.3. Ownership and the Use of Internal Techniques	182
7.4.4. Ownership and External Techniques Used	183
7.5. The Degree of Centralization and The adoption of Active vs. Passive Policy	185
7.6. Summary	186
 CHAPTER 8: CONCLUSION	 189-203
Summary of Study	189
<u>The Effectiveness of Corporate Practices</u>	196
<i>Foreign Exchange Exposure Identification</i>	196
<i>Policies in Exposure Management</i>	198
<i>Techniques in Foreign Exchange Exposure Management</i>	199
<u>Firm-specific Characteristics and The management Policies and Practices</u> ..	200
<i>Firm Size and the Management Policy and Practice Variables</i>	200
<i>The Degree of Foreign Involvement and the Management Practice Variables</i>	200
<i>Ownership and the Management Policies and Practice Variables</i>	201
Limitations and Directions for Future Research	201
 BIBLIOGRAPHY	 204-232
 APPENDIX A. COVERING LETTER AND QUESTIONNAIRE	 233-241
APPENDIX B. STATISTICAL SUMMARY OF SURVEY RESPONSES ..	237-255
APPENDIX C. CONTINGENCY TABLES OF ANALYSIS	256-285

List of Charts and Tables

CHART 1.1 INTERNATIONAL MERCHANDISE TRADE	2
CHART 1.2 THE DAILY TURNOVER of AUSTRALIAN DOLLAR (AUD)	3
CHART 1.3 THE VALUE of TRADE WEIGHTED EXCHANGE RATE INDEX ..	4

Table 5.1	Major Exposures Confronted by Australian Firms	124
Table 5.2	Types of Foreign Exchange Exposures Managed by Australian Firms	125
Table 5.3	Sources of Transaction Exposure Identified by Australian Firms	126
Table 5.4	Cross Tabulation of Methods Used and the Extent of Management on Transaction Exposures by Australian Firms	127
Table 5.5	Cross-Tabulation of Organizational Characteristics and the Extent of Translation Exposure Management	128
Table 5.6	Cross Tabulation of the Extent of Recognition and Management of Economic exposures by Australian Firms	129
Table 5.7	Major Factors Driving Australian Firms' Foreign Exchange Exposure Management	131
Table 5.8	Major Objectives Identified in Australian Firms' Foreign Exchange Exposure Management	132
Table 5.9	Cross Tabulation of Major Exposures and an Active versus Passive Policy	133
Table 5.10	Cross-tabulation of Percentage of Cover on Transaction Exposure and The Adoption of Policy	135
Table 5.11	Cross-tabulation of Percentage of Cover on Translation Exposure and The adoption of Policy	136
Table 5.12	Cross-tabulation of Percentage of Cover on Economic Exposure and the Adoption of Policy	137
Table 5.13	Sources of Forecast Used by Australian Firms	137
Table 5.14	Cross-Tabulation of Presentations and Sources of Exchange-rate Forecast	138
Table 5.15	Concentration of Currency of Forecast Used by Australian Firms	139
Table 5.16	The Degree of Centralization on Foreign Borrowing or Lending	140
Table 5.17	The Degree of Centralization on Foreign Transactions	141
Table 5.18	The Degree of Centralization on Hedging Foreign Currency By Australian Firms	141
Table 5.19	Internal Techniques Used by Australian Firms	143
Table 5.20	Critical Factor in Applying Internal Techniques	

Faced By Australian Firms	143
Table 5.21 External Techniques Used	145
Table 6.1 Major Foreign Exchange Exposures and Types Managed by Australian Firms	149
Table 6.2 Cross-Tabulation of Organizational Characteristics and the Extent of Translation Exposure Management	149
Table 6.3 The Degree of Centralization on Foreign Borrowing/Lending and Hedging Foreign Currency by Australian Firms	153
Table 6.4 The Number of Internal Techniques Used and Transaction Exposure as Major Exposure Faced By Australian Firms	155
Table 6.5 Organizational Characteristics and Ownership of Australian Firms Participating in the survey	156
Table 7.1 Chi-Square Test for Independence of Firm size and the External Techniques Used	163
Table 7.2 Chi-Square Test for Independence of Firm size and the External Techniques Used (Selected Respondents)	164
Table 7.3 Cross-tabulation of Firm Size and The Use of External Techniques ...	165
Table 7.4 Chi-Square Value for Independence of Firm Size and the Internal Techniques Used	167
Table 7.5 Chi-Square Test for Independence of Firm Size and the Adoption of an Active or Passive Policy	169
Table 7.6 Cross-tabulation of Firm Size and Active vs. Passive Policy	170
Table 7.7 Chi-Square Test for Independence of Firm Size and the Degree of Centralization	171
Table 7.8 The Chi-Square Value for Independence of the Degree of Foreign Involvement and The active vs. Passive Policy	172
Table 7.9 Chi-Square Value for Independence of the DFI and the Degree of Centralization	174
Table 7.10 Chi-Square Value for independence of The DFI and the External Techniques Used	175
Table 7.11 The Chi-Square Value for Independence of The DFI and the Internal Techniques Used	177
Table 7.12 Chi-Square Value for Independence of Ownership and	

the Degree of Centralization	179
Table 7.13 Cross Tabulation of Ownership and the Degree of Centralization	179
Table 7.14 Chi-Square Test for Independence of Ownership and the Adoption of Active vs. Passive Policy	182
Table 7.15 The Chi-Square Test for Independence of Ownership and Internal Techniques Used	183
Table 7.16 The Chi-Square Test for Independence of Ownership and Internal Techniques Used	184
Table 7.17 Chi-Square Test for Independence of the Degree of Centralization and The adoption of an Active/Passive Policy	185